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DESCRIPTION

Processes for the preparation of novel substituted propenone derivatives

✓ This application is a 371 of PCT/JP00/03456 filed May 29, 2000.

5 Technical Field

The present invention relates to processes for the preparation of novel substituted propenone derivatives and their crystals, in detail processes for the preparation of their intermediates, 2-acyl-5-benzylfuran derivatives and 1,2,4-triazole-3-carboxylic acid ester derivatives.

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Background Art

2-Acyl-5-alkylfuran derivatives, which are similar to 2-acyl-5-benzylfuran derivatives, can be prepared by introducing an acyl group to 2-alkylfuran derivatives through Friedel Crafts reaction (Japanese Patent Publication (Kokoku) 1995-78056, Japanese Patent Publication (Kokoku) 1995-78056 and Japanese Patent Publication (Kokai) 1986-53275).

2-Alkylfuran derivatives can be prepared by introducing an alkyl group to furan derivatives through Friedel Crafts reaction (Chem. France. 1962, 1166).

20 However, the preparation of 2-acyl-5-benzylfuran derivatives is not disclosed in these documents.

On the other hand, it is known that 1,2,4-triazole-3-carboxylic acid can be prepared by converting an amino group of 3-amino-1,2,4-triazole-5-carboxylic acid to a diazo group, isolating the diazonium salt and reducing.

25 It is known as a reducing method that 1) a diazonium salt is reduced with sodium hypophosphite ( $\text{NaH}_2\text{PO}_2$ ) and concentrated hydrochloric acid